

CLAIMS

1. A recording apparatus for recording an image on a recording medium on the basis of image data supplied from an image supply device, characterized by

5 comprising:

setting means for setting an overlay recording mode of a plurality of images depending on whether or not the image supply device sets a recording condition corresponding to a plurality of conditions required to
10 overlay and record a plurality of images supplied from the image supply device; and

control means for, in a case where said setting means sets the overlay recording mode of the plurality of images, controlling to overlay and record the
15 plurality of images supplied from the image supply device.

2. The apparatus according to claim 1, characterized in that:

20 in a case where a recording start command supplied from the image supply device includes a layout command and a plurality of image formats, said setting means sets the overlay recording mode of a plurality of images included in the recording start command.

25

3. The apparatus according to claim 1, characterized in that the plurality of conditions include conditions

that a plurality of image formats are included, and the plurality of images include at least one JPEG image, and a predetermined number of PNG images.

- 5 4. The apparatus according to claim 3, characterized in that the plurality of conditions further include the number of records and/or the number of images to be recorded on a single recording medium as a condition.
- 10 5. The apparatus according to claim 3, characterized in that said control means overlays the plurality of images supplied from the image supply device in an order in which the images are received.
- 15 6. The apparatus according to claim 1, characterized in that the plurality of image formats include at least one of an image format that designates an image which can be seen through, an image format that designates an image file stored at a specific storage location, an
20 image format that designates an image file with a specific file name, an image format that designates an image file with specific tag information, and an image format that designates image files in a specific order.
- 25 7. An image supply device for supplying image data to an image output device, characterized by comprising:
command issuance means for issuing an image

output command set with an overlay recording mode of a plurality of images depending on whether or not the image output device has a plurality of functions corresponding to a plurality of conditions required to
5 overlay and recording the plurality of images; and

means for supplying image data, which is requested from the image output device in response to the image output command issued by said command issuance means, to the image output device.

10

8. An image supply device for supplying image data to an image output device, characterized by comprising:

first acquisition means for acquiring format information of image files that can be handled by the
15 image output device;

second acquisition means for, in a case where the format information acquired by said first acquisition means includes predetermined format information, acquiring a layout function supported by the image
20 output device;

setting means for, in a case where the layout function acquired by said second acquisition means satisfies a predetermined condition, setting a plurality of image data and a layout function to be
25 supplied to the image output device;

command issuance means for issuing an image output command to the image output device on the basis

of the plurality of image data and the layout function set by said setting means; and

means for supplying image data, which is requested from the image output device in response to
5 the image output command issued by said command issuance means, to the image output device.

9. The device according to claim 8, characterized in that the predetermined format information includes a
10 JPEG format and a PNG format.

10. The device according to claim 8, characterized in that the predetermined condition of the layout function includes a 1-up or N-up function.
15

11. A control method for a recording apparatus for recording an image on a recording medium on the basis of image data supplied from an image supply device, characterized by comprising:

20 a setting step of setting an overlay recording mode of a plurality of images depending on whether or not the image supply device sets recording conditions corresponding to a plurality of conditions required to overlay and record a plurality of images supplied from
25 the image supply device; and

a control step of controlling, in a case where the overlay recording mode of the plurality of images

is set in said setting step, to overlay and record the plurality of images supplied from the image supply device.

5 12. The method according to claim 11, characterized in that said setting step includes a step of setting, in a case where a recording start command supplied from the image supply device includes a layout command and a plurality of image formats, the overlay recording mode
10 of a plurality of images included in the recording start command.

13. The method according to claim 11, characterized in that the plurality of conditions include conditions
15 that a plurality of image formats are included, and the plurality of images include at least one JPEG image, and a predetermined number of PNG images.

14. The method according to claim 13, characterized in
20 that the plurality of conditions further include the number of records and/or the number of images to be recorded on a single recording medium as a condition.

15. The method according to claim 13, characterized in
25 that said control step includes a step of overlaying the plurality of images supplied from the image supply device in an order in which the images are received.

16. A control method for an image supply device for supplying image data to an image output device, characterized by comprising:

5 a first acquisition step of acquiring format information of image files that can be handled by the image output device;

 a second acquisition step of, in a case where the format information acquired in said first acquisition
10 step includes predetermined format information, acquiring a layout function supported by the image output device;

 a setting step of setting, in a case where the layout function acquired in said second acquisition
15 step satisfies a predetermined condition, a plurality of image data and a layout function to be supplied to the image output device;

 a command issuance step of issuing an image output command to the image output device on the basis
20 of the plurality of image data and the layout function set in said setting step; and

 a step of supplying image data, which is requested from the image output device in response to the image output command issued in said command
25 issuance step, to the image output device.

17. The method according to claim 16, characterized in

- 79 -

that the predetermined format information includes a JPEG format and a PNG format.

18. The method according to claim 16, characterized in
5 that the predetermined condition of the layout function includes a 1-up or N-up function.

19. A program characterized by executing a control method of claim 11.

10

20. A program characterized by executing a control method of claim 16.

21. A recording apparatus for recording an image on a
15 recording medium on the basis of image data supplied from an image supply device, characterized by comprising:

reception means for receiving a recording command with a hierarchical structure, which is transmitted
20 from the image supply device;

first determination means for determining whether an upper layer of the recording command designates a first recording mode that records a plurality of images on a single recording medium;

25 second determination means for, in a case where said first determination means determines that the first recording mode is designated, determining a

- 80 -

second recording mode designated by a lower layer of the upper layer; and

control means for controlling to execute, in a case where said second determination means cannot
5 determine the second recording mode, a recording operation according to the first recording mode determined by said first determination means, and to execute, in a case where said second determination means can determine the second recording mode, a
10 recording operation according to the second recording mode determined by said second determination means.

22. The apparatus according to claim 21, characterized in that the second recording mode is a mode for
15 determining positions of a plurality of images to be recorded on the single recording medium in a recording process.

23. The apparatus according to claim 21, characterized in that the second recording mode is a mode for
20 overlaying the other image on one image of a plurality of images to be recorded on the single recording medium in a recording process.

25 24. The apparatus according to claim 21, characterized in that:

in a case where the second recording mode

includes a recording mode based on composition of a background image, and an image to be overlaid on the background image, said apparatus further comprising:

specifying means for specifying the background
5 image; and

variable magnification means for applying a variable magnification process of the background image specified by said specifying means in correspondence with the size of the recording medium.

10

25. The apparatus according to claim 24, characterized in that said specifying means identifies based on a storage location of an image file in the image supply device whether the image file is designated as the
15 background image.

26. The apparatus according to claim 24, characterized in that said specifying means specifies based on a file name of an image file in the image supply device that
20 an image in the image file is the background image.

27. The apparatus according to claim 24, characterized in that said specifying means specifies based on a file type of an image file in the image supply device that
25 an image of the image file is the background image.

28. The apparatus according to claim 24, characterized

in that said specifying means specifies based on tag information of an image file in the image supply device that an image of the image file is the background image.

- 5 29. The apparatus according to claim 24, characterized in that said specifying means specifies based on a transfer order of image files transferred from the image supply device that an image of the image file is the background image.

10

30. A recording system including an image supply device and a recording apparatus, and recording an image on a recording medium by the recording apparatus on the basis of image data supplied from the image supply device, characterized in that:
- 15

the image supply device transmits a recording command with a hierarchical structure to the recording apparatus, and

the recording apparatus comprising:

- 20 reception means for receiving a recording command with a hierarchical structure, which was transmitted from the image supply device;

first determination means for determining whether an upper layer of the recording command designates a first recording mode that records a plurality of images on a single recording medium;

25

second determination means for, in a case where

said first determination means determines that the first recording mode is designated, determining a second recording mode designated by a lower layer of the upper layer; and

- 5 control means for controlling to execute, in a case where said second determination means cannot determine the second recording mode, a recording operation according to the first recording mode determined by said first determination means, and to
- 10 execute, in a case where said second determination means can determine the second recording mode, a recording operation according to the second recording mode determined by said second determination means.
- 15 31. The system according to claim 30, characterized in that the second recording mode is a mode for determining positions of the plurality of images to be recorded on the single recording medium in a recording process.
- 20 32. The system according to claim 30, characterized in that the second recording mode is a mode for overlaying the other image on one image of the plurality of images to be recorded on the single recording medium in a
- 25 recording process.

33. A control method in a recording system for

recording an image on a recording medium by the recording apparatus on the basis of image data supplied from an image supply device, characterized by comprising:

5 a transmission step of transmitting a recording command with a hierarchical structure from the image supply device to the recording apparatus;

 a first determination step of determining whether an upper layer of the recording command transmitted in
10 the transmission step designates a first recording mode that records a plurality of images on a single recording medium;

 a second determination step of determining, in a case where it is determined in said first determination
15 step that the first recording mode is designated, a second recording mode designated by a lower layer of the upper layer; and

 a step of executing, in a case where the second recording mode cannot be determined in said second
20 determination step, a recording operation according to the first recording mode determined in said first determination step; and

 a step of executing, in a case where the second recording mode can be determined in said second
25 determination step, a recording operation according to the second recording mode determined in said second determination step.

34. The method according to claim 33, characterized in that the second recording mode is a mode for determining positions of the plurality of images to be recorded on the single recording medium in a recording process.

35. The method according to claim 33, characterized in that the second recording mode is a mode for overlaying an image on one image of the plurality of images to be recorded on the single recording medium in a recording process.

36. A program for executing a control method in a recording system for recording an image on a recording medium by the recording apparatus on the basis of image data supplied from an image supply device, characterized by comprising:

a transmission step module of transmitting a recording command with a hierarchical structure from the image supply device to a recording apparatus;

a first determination step module of determining whether an upper layer of the recording command transmitted in said transmission step designates a first recording mode that records a plurality of images on a single recording medium;

a second determination step module of determining,

in a case where it is determined in said first determination step that the first recording mode is designated, a second recording mode designated by a lower layer of the upper layer; and

5 a step module of executing, in a case where the second recording mode cannot be determined in said second determination step, a recording operation according to the first recording mode determined in said first determination step; and

10 a step module of executing, in a case where the second recording mode can be determined in said second determination step, a recording operation according to the second recording mode determined in said second determination step.

15

37. A recording apparatus for recording an image on a recording medium based on image data supplied from an image supply device, characterized by comprising:

20 reception means for receiving a layout condition from the image supply device, wherein the layout condition specifies a layout of recording a plurality of items of image data on a recording medium, which are supplied from the image supply device; and

25 control means for controlling to record a plurality of items of image data supplied from the image supply device by overlapping or not overlapping in accordance with the layout condition, based on

formats of the items of image data.

38. An apparatus according to claim 37, characterized
in that said control means controls to record an image
5 whose format designates an image to be seen through, by
overlapping with another image.

39. An apparatus according to claim 37, characterized
in that said control means controls to record an image
10 by overlapping with another image, in a case where a
type of the image is different from a type of another
image.

40. An apparatus according to claim 37, characterized
15 in that any one of the formats includes JPEG or other
than JPEG.

41. A recording apparatus for recording an image on a
recording medium based on image data supplied from an
20 image supply device, characterized by comprising:

reception means for receiving a layout command
for specifying a layout of recording a plurality of
images on a recording medium and designation data for
designating a plurality of images to be recorded, from
25 the image supply device; and

control means for controlling to record a
specific image by overlapping with another image, in a

case where images designated by the designation data include the specific image.

42. An apparatus according to claim 41, characterized
5 in that the specific image is an image to be seen through.

43. An apparatus according to claim 41, characterized
in that the specific image has a predetermined format
10 of image other than JPEG.

44. An apparatus according to claim 41, characterized
in that the specific image has a predetermined file
name or arranged in a predetermined holder.
15

45. An apparatus according to claim 41, characterized
by further comprising set means for setting an order of
overlapping images in accordance with an order of
designation of images among the images designated by
20 the designation data.

46. A recording method of recording an image on a
recording medium based on image data supplied from an
image supply device, characterized by comprising the
25 steps of:

receiving a layout condition from the image
supply device, wherein the layout condition specifies a

layout of recording a plurality of items of image data on a recording medium, which are supplied from the image supply device; and

controlling to record a plurality of items of
5 image data supplied from the image supply device by overlapping or not overlapping in accordance with the layout condition, based on formats of the items of image data.

10 47. A recording method of recording an image on a recording medium based on image data supplied from an image supply device, characterized by comprising the steps of:

receiving a layout command for specifying a
15 layout of recording a plurality of images on a recording medium and designation data for designating a plurality of images to be recorded, from the image supply device; and

controlling to record a specific image by
20 overlapping with another image, in a case where images designated by the designation data include the specific image.

48. A computer readable recording medium characterized
25 by storing a program of implementing a recording method according to claim 46.

49. A computer readable recording medium characterized by storing a program of implementing a recording method according to claim 47.

5 50. A program characterized by implementing a recording method according to claim 46.

51. A program characterized by implementing a recording method according to claim 47.